

Draft summary of advisory chapter for review – 6/19/06

Summary

Striped bass consumption advisories vary greatly among Atlantic coastal states. Several states as in Florida, Georgia, South Carolina, and North Carolina do not have an advisory for Striped Bass. Other states, such as Maine, New Hampshire, Virginia, and Pennsylvania have issued a limited consumption advisory, but do not distinguish for sensitive populations. States such as Connecticut, Massachusetts, New Jersey, Rhode Island, Maryland, and Delaware have issued advisories for striped bass for both general and sensitive populations. New York however, is unique in that it has a specific source of PCB contamination and thus has issued various advisories in its waterbodies such as the Hudson River and New York Harbor. Among most of the Northeastern states, the advice given for consumption of striped bass (and usually bluefish) is fairly consistent with suggested rates of 0.5-2 fish servings per month for the general population and no consumption for sensitive groups where the state has separate advice for these populations.

Fish advisories for bluefish among the Atlantic coastal states also vary greatly. Several states such as Pennsylvania, Florida, Georgia, South Carolina, North Carolina, and Maryland do not have an advisory for bluefish. Other states, such as Maine, New Hampshire, and Pennsylvania have issued a limited consumption advisory, but do not distinguish for sensitive populations. States such as Connecticut, Massachusetts, New Jersey, Rhode Island, and Delaware have issued advisories for bluefish for both general and sensitive populations which are mostly no consumption for sensitive populations and limited consumption for the general population. New York however, is unique in that it has a specific source of PCB contamination and thus has issued varying advisories in its waterbodies.

Most states along the Atlantic coast have not chosen to assume contaminant loss while cooking. Only 5 of 14 states have chosen to use cooking loss when deriving consumption advisories. Connecticut, Pennsylvania, North and South Carolina, and Maryland assume a cooking loss (except for Maryland which assumes 30% only for the general population) of 50%. A literature review has indicated that while it is widely agreed that there is some loss in contaminant concentration during the cooking process and from trimming, there is variation among the different species and the type of cooking involved and the greatest reduction in PCB concentration involves both trimming and cooking.

The majority of the Atlantic coastal states use a cancer risk of 1 in 10,000-1,000,000 when developing fish consumption advisories. All but Connecticut, Florida, South and North Carolina, use a 1 in 100,000 cancer risk with Florida being most conservative at 1 in 1,000, 000 and the other mentioned states as least conservative at 1 in 10,000 as a basis for developing fish consumption advisories (New York is unique in that it has an advisory for both a cancer risk of 1 in 10,000 and 1 in 100,000). Cancer risk references are not available for Georgia, Pennsylvania, Massachusetts, and, Rhode Island.

All but 4 of the Atlantic coastal states use the EPA reference dose as a noncancer reference source to develop fish consumption advisories. The other states (Connecticut, Pennsylvania, Massachusetts, and Rhode Island) use either the FDA tolerance limit or the Great Lakes Protocol as a noncancer reference. In addition, South Carolina uses both the Great Lakes Protocol and the EPA reference dose to develop fish consumption advisories.

Conclusion

Although there appears to be great variety and divergence in bluefish and striped bass advice among Atlantic coastal states, there is in fact many similarities and areas where consensus could be built. Most of the northeast states (ME, CT, NH, MA, NJ, and DE) have current advisories that are very similar. Southern states on the east coast have less restrictive advice or no advice. This is likely due to in part lower levels of PCBs in these state's fish, especially striped bass. In addition, some of the southern states do not have adequate data to issue an advisory on these two fish species.

Despite differences in how the advisories are derived under various risk assessment methodologies, it appears that most states are not far apart in how they view PCB toxicity and exposure assessment. Only minor to moderate changes would need to be implemented to bring states closer together in their advisory derivation process.